10/526980 DT01 Rec'd PCT/PT0 07 MAR 2005

Docket No.: 040116 SHIM.018

AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (Original) A code type thermal fuse comprising:

a fuse core produced by winding a conductor meltable at a predetermined temperature on an insulating core member continuously provided in the length direction; and

an insulating cover covering the outer periphery of said fuse core, characterized in that: said conductor can be cut by expanding said insulating core member at a predetermined temperature and/or by contracting said insulating cover at said predetermined temperature.

2. (Original) The code type thermal fuse as claimed in claim 1, further characterized in that:

said insulating core member has at least one or more protrusions formed continuously or intermittently in the length direction on the outer periphery of said insulating core member.

3. (Currently Amended) The code type thermal fuse as claimed in <u>claim 1</u> or <u>claim 2</u>, further characterized in that:

said insulating cover has at least one or more protrusions formed continuously or intermittently in the length direction on the inner periphery of said insulating cover.

4. (Original) The code type thermal fuse as claimed in claim 1, further characterized in that:

Docket No.: 040116

SHIM.018

3

another line-shaped or braid-shaped insulator is provided on the inner peripheral side of said insulating cover; and

said conductor is sandwiched between said insulating core member and said line-shaped or braid-shaped insulator at least partially in the length direction of said conductor.

5. (Original) The code type thermal fuse as claimed in claim 4, further characterized in that:

said line-shaped or braid-shaped insulator has a characteristic of contracting in the length direction around a melting temperature of said conductor.

6. (Original) The code type thermal fuse as claimed in claim 4, further characterized in that:

said line-shaped or braid-shaped insulator has a characteristic of expanding in the peripheral direction around a melting temperature of said conductor.

7. (Currently Amended) The code type thermal fuse as claimed in any one claim of claim 1 through claim 6 claim 1, further characterized in that:

said insulating core member comprises a gas-containing material as a structural element.

8. (Original) The code type thermal fuse as claimed in claim 7, further characterized in

Docket No.: 040116 SHIM.018

4

that:

said insulating core member comprises a gas-containing material covering a periphery of a tensile resistant member at the center of said insulating core member.

9. (Currently Amended) A sheet type thermal fuse, comprising:

the code type thermal fuse according to any one claim of claim 1 through claim 8 claim 1, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said code type thermal fuse.

- 10. (New) The code type thermal fuse as claimed in claim 2, further characterized in that: said insulating cover has at least one or more protrusions formed continuously or intermittently in the length direction on the inner periphery of said insulating cover.
 - 11. (New) The code type thermal fuse as claimed in claim 2, further characterized in that: said insulating core member comprises a gas-containing material as a structural element.
 - 12. (New) The code type thermal fuse as claimed in claim 3, further characterized in that: said insulating core member comprises a gas-containing material as a structural element.
 - 13. (New) The code type thermal fuse as claimed in claim 4, further characterized in that:

5

Docket No.: 040116 SHIM.018

said insulating core member comprises a gas-containing material as a structural element.

14. (New) The code type thermal fuse as claimed in claim 5, further characterized in that: said insulating core member comprises a gas-containing material as a structural element.

15. (New) The code type thermal fuse as claimed in claim 6, further characterized in that: said insulating core member comprises a gas-containing material as a structural element.

16. (New) A sheet type thermal fuse, comprising:

the code type thermal fuse according to claim 2, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said code type thermal fuse.

17. (New) A sheet type thermal fuse, comprising:

the code type thermal fuse according to claim 3, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said code type thermal fuse.

18. (New) A sheet type thermal fuse, comprising:

the code type thermal fuse according to claim 4, provided on a flat surface in a serpentine

6

SHIM.018

manner; and

means for fixing a layout of said code type thermal fuse.

19. (New) A sheet type thermal fuse, comprising:

the code type thermal fuse according to claim 5, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said code type thermal fuse.

20. (New) A sheet type thermal fuse, comprising:

the code type thermal fuse according to claim 6, provided on a flat surface in a serpentine manner; and

means for fixing a layout of said code type thermal fuse.